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| 09/532,735  | 03/22/2000  | Hiroshi Furuyama     | P19245              | 8254             |
| 7055  | 7590        | 09/09/2004           | EXAMINER            |                  |
| GREENBLUM & BERNSTEIN, P.L.C.<br>1950 ROLAND CLARKE PLACE<br>RESTON, VA 20191 |             |                      | NGUYEN, HUY THANH   |                  |
|   |             |                      | ART UNIT            | PAPER NUMBER     |
|   |             |                      | 2616                |                  |

DATE MAILED: 09/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/532,735

Applicant(s)

FURUYAMA, HIROSHI

Examiner

HUY T NGUYEN

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 6 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) 4-18, 24-26 and 28-31 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 19-23 and 27 is/are rejected.
- 7) ☒ Claim(s) 3 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 3.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION*****Election/Restrictions***

1. Applicant's election with traverse of claim 1-3, 19-23 and 27 in the reply filed on 17 June 2004 is acknowledged. The traversal is on the ground(s) that the recitation of each of the independent claims ... so closely related to make a restriction requirement inappropriate and claim of **various species** are so closely related ...that there is no serious burden on examiner ...." This is not found persuasive because the figures and associated descriptions in the specification for each of species discloses different arrangement of circuits and operations . For example species represented by Fig. 2 using a plurality of demultiplexing sections for demultiplexing stored video, audio and identification data in parallel when an occurrence of the request for reproducing and request for retrieval are overlapped and Fig. 4 representing another species using a demultiplexing section before a storage for demultiplexing video, audio and identification data that is not requires an occurrence of a reproducing and retrieval requests are overlapped . It is clearly that each species for each of independent claims are so different from each another and that a restriction requirement is appropriate . Since the invention for each of species that being recited in each of independent claim is different to another species , a serious burden on examiner in examining the case if a restriction is not requirement. The requirement is still deemed proper and is therefore made FINAL.

Claims 4-19 and 22-26 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention , there being no

Art Unit: 2616

allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 17 June 2004 .

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claim 2 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claim 2 recite an additional plurality of demultiplexing section and a plurality of retrieval sections that are not describes in the disclosure section of the specification . See Fig. 2 and the associated descriptions in the specification ) .

4. Claim 2 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 2, line 10, there is no antecedent base for "said plurality of demultiplexing sections" . Therefore it is not clear whether "said plurality of demultiplexing sections" being reference to as recited at line 6, in claim 1 or to "said plurality of demultiplexing sections" at line 3 of claim 2.

Art Unit: 2616

In claim 2, the structural interrelationships between “ a plurality of demultiplexing sections ” recited in claim 1 and recited in claim 2 is omitted and interrelationships between “ a retrieval section ” recited in claim 1 and a “plurality of retrieval sections” recited in claim 2 is omitted that making a gap between the recited elements in claims.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1 rejected under 35 U.S.C. 102(e) as being anticipated by Nagata et al (6,643,449).

Regarding claim 1, Nagata teaches video storage and retrieval apparatus (Fig. 2) comprising:

a storage (26) that is configured to store a data stream n which identification data with identification information for retrieval incorporated therein is multiplexed along with video data and audio data;

Art Unit: 2616

a plurality of demultiplexing sections (22,23) that are configured to demultiplex said data stream stored in said storage to the video data, the audio data, and the identification data (column 5, lines 1-22);

a decoding section (8,9) that is configured to decode the video data and the audio data, each demultiplexed, to reproduce (column 4, lines 52-68) ; and

a retrieval section (29) that is configured to retrieve specific video data and specific audio data based on demultiplexed identification data, wherein when occurrences of a reproduction request and a retrieval request overlap in time, said plurality of demultiplexing sections execute demultiplexing to extract the identification data for retrieval from said data stream and demultiplexing to extract the video data and the audio data each for reproduction from said data stream in parallel since Nagata teaches that the data to reproduce during a recording and the retrieved data from the storage in the time shift reproduction can be performed at the same time (overlapped ) (column 5, lines 1-22) .

Regarding claim 2, Nagata further teaches the plurality of demultiplexing sections that are configured to execute demultiplexing to extract the identification data for retrieval from said data stream (column 5, lines 1-22); and

a plurality of retrieval sections that are configured to retrieve: specific video data and specific audio data based on the identification data, wherein said plurality of demultiplexing sections and said plurality of retrieval sections execute retrieval processing on a plurality of data streams in parallel (column 5, lines 1-22).

Art Unit: 2616

Regarding claim 19, Nagata further teaches the data stream is an MPEG stream conforming to MPEG as a moving picture coding standard (columns 1,4 and 19)

Regarding claim 20, Nagata further teaches the MPEG stream, each of the video data, the audio data and the identification data is constructed in packets, and said packets are multiplexed as Packetized Elementary Stream (column 1,4)

Regarding claim 21, Nagata further teaches the MPEG stream, the identification data is contained in a stream header to include stream information, and is multiplexed along with the video data and the audio data (column 4).

Regarding claim 22, Nagata further teaches the MPEG stream, the identification data is stored as a private descriptor in a PAT (Program Association Table) , a PMT (Program Map Table) or a CAT (Conditional Access Table), and is multiplexed along with the video data and the audio data (column 8).

Regarding claim 23, Nagata further teaches the MPEG stream, the identification data is stored as private data section, and is multiplexed along with the video data and the audio data (column 4, line 29-51, column 8, lines 9-21).

Method claim 27 corresponds to apparatus claim 1. Therefore method claim 27 is rejected by the same reason as applied to apparatus claim 1.

***Claim Rejections - 35 USC § 103***

Art Unit: 2616

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 1-3, 19-13 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takashimizu et al (6,185,228).

Regarding claim 1, Takashimizu teaches video storage and retrieval apparatus (Fig. 1) comprising:

a storage (423) that is configured to store a data stream in which identification data with identification information for retrieval incorporated therein is multiplexed along with video data and audio data;



Art Unit: 2616

a plurality of demultiplexing sections (404) that are configured to demultiplex said data stream stored in said storage to the video data, audio data, and identification data (column 4, lines 40-65, column 6 lines 15-53) ;

a decoding section (405) that is configured to decode the video data and the audio data, each demultiplexed, to reproduce (column 4, lines 40-65) ; and

a retrieval section (409) that is configured to retrieve specific video data and specific audio data based on demultiplexed identification data (column 6, lines 15-38).

Takashimizu fails to teach when occurrences of a reproduction request and a retrieval request overlap in time, said plurality of demultiplexing sections execute demultiplexing to extract the identification data for retrieval from said data stream and demultiplexing to extract the video data and the audio data each for reproduction from said data stream in parallel .

Barton teaches apparatus having a control means for performing of reproducing and retrieval operations of stream data in parallel (simultaneously reproducing, reviewing and viewing stored stream data (column 3, lines 20-29).

It would have been obvious to one of ordinary skill in the art to modify Takashimizu with Barton by providing the apparatus of Takashimizu with a control means as taught by Barton for enabling the extracting identification data and video data and audio data from demultiplexing sections in parallel thereby enhancing the capacity of the apparatus of Takashimizu when reproducing and retrieval data stream are overlapped.

Art Unit: 2616

Regarding claim 2, Takashimizu further teaches a plurality of demultiplexing sections (413,404) that are configured to execute demultiplexing to extract the identification data for retrieval from said data stream; and

a plurality of retrieval sections (409) that are configured to retrieve: specific video data and specific audio data based on the identification data, wherein said plurality of demultiplexing sections and said plurality of retrieval sections execute retrieval processing on a plurality of data streams in parallel (column 5, line 4 –45, column 6, lines 13-28).

Regarding claim 19, Takashimizu as modified with Barton further teaches the data stream is an MPEG stream conforming to MPEG as a moving picture coding standard (See Takashimizu , column 4 , Fig. 2) .

Regarding claim 20, Takashimizu further teaches the MPEG stream, each of the video data, the audio data and the identification data is constructed in packets, and said packets are multiplexed as Packetized Elementary Stream (See Takashimizu column 5)

Regarding claim 21, Takashimizu further teaches the MPEG stream, the identification data is contained in a stream header to include stream information, and is multiplexed along with the video data and the audio data (Fig. 2).

Regarding claim 22, Takashimizu further teaches that in the MPEG stream, the identification data is stored as a private descriptor in a PAT (Program Association Table) , a PMT (Program Map Table) or a CAT (Conditional Access Table), and is multiplexed along with the video data and the audio data (column 5).

Art Unit: 2616

Regarding claim 23, Takashimizu further teaches that in said MPEG stream, the identification data is stored as private data section, (column 5) and is multiplexed along with the video data and the audio data.

Method claim 27 corresponds to apparatus claim 1. Therefore method claim 27 is rejected by the same reason as applied to apparatus claim 1.

***Allowable Subject Matter***

9. Claim 3 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Na et al and Lenihan et al teach apparatus using identification information for extracting video and audio data .

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUY T NGUYEN whose telephone number is (703) 305-4775. The examiner can normally be reached on 8:30AM -6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's acting supervisor, can be reached on (703) 305-4725. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2616

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

H.N

  
HUY NGUYEN  
PRIMARY EXAMINER